



7510-395-191

# Material Safety Data Sheet

## 1.0 Product and Company Identification

### Identification of the Preparation

### HP LaserJet Print Cartridge C4191A

### Company Identification

Hewlett-Packard Company  
11311 Chinden Boulevard  
Boise, Idaho 83714  
United States

### Emergency Telephone Number Hewlett-Packard Health Effects Line

1-800-457-4209 (USA and Canada)  
503-494-7199 (USA direct)  
Singapore: +00 1-800-332-1 332 1

### General Information Telephone Number

208-323-2551 (USA direct)

### Local Contact Information

**Ireland**  
Liffey Park Technology Park  
Barnhall Road Leixlip, Co.  
Kildare, Ireland  
Phone: 01 6150000

**United Kingdom**  
Hewlett-Packard, Ltd.  
Cain Road, Amen Corner  
Bracknell, Berkshire, RG12 1 HN  
Phone: 1344 36-0000

Hazard Rating	US NFPA/HMIS
Health	1
Flammability	1
Instability/Reactivity	0
Special	N/A

## 2.0 Composition/Information on Ingredients

This product is a toner preparation that is used in Hewlett-Packard LaserJet 4500 and 4550 printers.

Component/Substance	CAS Number	EU Number	% by Weight	Risk Phrases
Styrene Acrylate Copolymer	-	-	40 - 50	-
Iron Oxide	1317-61-9	215-277-5	40 - 50	-

## 3.0 Hazard Identification

The preparation is not classified according to EU Directive 1999/45/EC

**3.1 Routes of Exposure** Inhalation, ingestion, skin and eyes.



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## 3.2 Acute Health Hazards

- Inhalation:** Minimal respiratory tract irritation may occur with exposure to large amount of toner dust.
- ingestion:** Ingestion is not applicable route of entry for intended use.
- Skin:** Unlikely to cause skin irritation
- Eyes:** May cause eye irritation.

## 3.3 Chronic Health Hazards

Prolonged inhalation of excessive amounts of any dust may cause lung damage. Use of this product as intended does not result in inhalation of excessive amounts of dust.

## 3.4 Carcinogenicity

Refer to section 11.

## 4.0 First Aid Measures

- Inhalation:** Move person to fresh air immediately. If symptoms occur, consult a physician.
- Ingestion:** Dilute stomach contents with several glasses of water. Get medical attention if symptoms persist.
- Skin:** Wash affected areas thoroughly with soap and water. If irritation persists, consult a physician.
- Eyes:** Immediately flush with large amounts of clean, lukewarm water (low pressure) for at least 15 minutes. If irritation persists, consult a physician.

## 5.6 Fire Fighting Measures

- Extinguishing media** CO<sub>2</sub>, water, dry chemical
- Unsuitable Extinguishing Media** None known
- Special Firefighting Procedures** None
- Unusual fire and explosion hazards** Toner material, like most organic material in powder form, is capable of creating a dust explosion.
- Auto-ignition temperature** No data available
- Flashpoint (method)** Not applicable
- Hazardous Combustion Products** Combustion will produce carbon dioxide and, possibly toxic chemicals such as carbon monoxide

## 6.0 Accidental release measures

- 6.1 Spill or leak procedures** Wear personal protective equipment as described in Section 8. Avoid breathing dust. Minimize the release of particles, Vacuum or sweep the material into a bag or other sealed container. If a vacuum is used, the motor must be rated as dust tight. Dispose of waste toner in accordance with local requirements.



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## 6.2 Environmental precautions

Do not discharge into drains (See also section 13 Disposal Considerations).

## 7.0 Handling and Storage

### Advice on safe handling and protection against fire

Keep material out of reach of children. Avoid inhalation of dust and contact with eyes. Keep away from excessive heat, sparks, and open flames.

### Requirements for storage rooms and advice on storage compatibility

Keep out of the reach of children. Keep container closed and store at room temperature. Keep away from strong oxidizers.

## 8.0 Exposure control/ personal protection

### 8.1 Exposure Limit Values

USA OSHA (TWA/PEL): 15 mg/m<sup>3</sup> (Total Dust)

5 mg/m<sup>3</sup> (Respirable Fraction)

ACGIH (TWA/TLV): 10 mg/m<sup>3</sup> (Inhalable Particulate)

3 mg/m<sup>3</sup> (Respirable Particulate)

TRGS 500 (Luftgrenzwert): 10 mg/m<sup>3</sup> (Einatembare Partikel)

3 mg/m<sup>3</sup> (Alveolengangige Fraktion)

### 8.2 Exposure Controls

#### Respiratory protection

Not required under intended use

#### Ventilation

Good general ventilation should be sufficient under intended use

#### Protective gloves

Not required under intended use

#### Eye protection

Not required under intended use

#### Other protective equipment

Not required under intended use

## 9.0 Physical and chemical properties

pH Not applicable

Boiling point Not applicable

Flash point Not applicable

Melting point 100 - 150°C (Softening Point)

Flammability Non-flammable solid (according to test methods of USA 16 CFR 1500.44 and 84/449/EEC (Annex V) A.IO)

Explosive properties Toner material, like most organic material in powder form, is capable of creating a dust explosion

Oxidizing properties No data available

Vapor Pressure Not applicable

Specific gravity (H<sub>2</sub>O=1) 1.4 - 1.8

Solubility in water Negligible

Solubility in organic solvents Partially soluble in toluene and xylene

Partition coefficient Not applicable

Viscosity Not applicable



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**Vapor density** Not applicable  
**Evaporation rate** Not applicable  
**Physical state** Fine powder  
**Color** Black  
**Odor** Slight plastic odor  
**Other** None Known

## 10.0 Stability and reactivity

**Stability** Stable under normal storage conditions  
**Incompatibilities** Strong oxidizers  
**Hazardous decomposition products** Combustion will produce carbon dioxide and, possibly toxic chemicals such as carbon monoxide  
**Hazardous polymerization** Will not occur

## 11 .O Toxicological information

Refer to Section 3 for potential health effects and Section 4 for first aid measures

### Acute Toxicity:

**Inhalation:** LC<sub>50</sub>:inh-rat>5mg/L/4 hrs. (data from similar toner), not harmful.

**Ingestion:** LD<sub>50</sub>:ori-rat>2000 mg/kg (data from ingredients of toner).

**Eye Contact:** Not classified as irritant, according to OSHA Hazard Communication Standard (HCS) and EU Directive 67/548/EEC (data from ingredients of toner).

**Skin Contact:** Not classified as irritant, according to OSHA Hazard Communication Standard (HCS) and EU Directive 67/548/EEC (data from ingredients of toner).

**Chronic Toxicity:** No data available

**Sensitization:** Not classified as a sensitizer according of EU Directive 67/548/EEC and OSHA HCS (US).

**Mutagenicity:** Negative, does not indicate mutagenic potential (Ames Test: Salmonella typhimurium)

**Carcinogenicity:** Not a known or suspected carcinogen according to any IARC Monograph, NTP, OSHA Regulations (USA), EU Directive, or Proposition 65 (California)

**Reproductive Toxicity:** Not classified as toxic according to EU Directive 67/548/EEC, California Prop. 65, or DFG (Germany).

**Other:** Sub-Acute Toxicity (Rat)- 90 day inhalation test, No Observable Effect Level (NOEL): 16 mg/m<sup>3</sup>. Expected air concentration levels under printing conditions are <0.01mg/m<sup>3</sup>.



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## 12.0 Ecological Information

No data available for ecological and wastewater treatment (sewage) systems. Avoid spills and dispose of in accordance with applicable laws and regulations.

## 13.0 Disposal considerations

Product // unused product // contaminated packaging (for Germany only)  
Recommendation: consult with the disposal agency and the relevant authorities;  
cleansing agent is water.

## 14.0 Transportation information

Not a regulated article under DOT, IATA, ADR, or RID

**UN Number** None

**Class** None

**Proper Shipping Name** None

**Packing Group** None

**Special Precautions** Not identified

## 15.0 Regulatory information

**US EPA TSCA Inventory** All ingredients are listed on TSCA inventory

**US EPA TSCA 12(b)** None

**US California Proposition 65** None

**EU Notification** All components in this product are compliant with  
EU Chemical Inventory regulations.

**EU R&S Phrase Information** **No** European Risk Phrases (labeling data)

**Dangerous Components** None  
(CAS No.) wt%

**USA Labeling**

**Symbol** Not required

**Hazard Warning** Not required

**Safety Advice** Not required

**Hazardous Component(s)** None

## 16.0 Other information

**Date Prepared:** August 1, 2002

**HP-DMS Document Control** 09000de780228476

**Number:**

**Revision Information:** This document replaces all prior versions of the MSDS

**EU Information** This MSDS was prepared in compliance with EU Directive  
91/155/EEC as amended by 2001/58/EC and USA OSHA  
Hazard Communications regulations (29CFR1910:1200).

**DISCLAIMER:** This Material Safety Data Sheet (MSDS) is provided without charge to  
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the time of preparation of this MSDS and is believed to be accurate. It should not be construed as guaranteeing specific properties of the products as described or their suitability for a particular application.